

Techniques in Molecular Biochemistry (CBCH 4310) - CRN 12779 Fall 2018

Prerequisites: CHEM 4330, CBCH 3414, or instructor approval.

Course Director: Dr. Kyle L. Johnson; BRB 3.148; 747-6889; kljohnson@utep.edu

Participating Faculty Members. This semester's instructors will be drawn from the following list: Drs. Renato Aguilera, Igor Almeida, Anthony Darrouzet-Nardi, Sid Das, Laura Diaz-Martinez, Guilio Francia, Eli Greenbaum, Kyung-An Han, Kyle Johnson, Arshad Khan, Phillip Laveretsky, Manuel Llano, Rosa Maldonado, Luis Martinez, Jennie McLaren, Manuel Miranda, Michael Moody, Hugues Ouellet, Anita Quintana, Germán Rosas-Acosta, Sukla Roychowdhury, Charles Spencer, Jianjun Sun, Charlotte Vines, and Jianying Zhang.

Office Hours (Dr. Johnson): Bioscience Research Building, Room 3.148, MW 1:30-2:50, or by appointment.

Lecture: TR 3:00-4:20 pm

Location: Education Building (EDUC), Room 202 - **moved to LART 307**

Optional textbook: Alberts, *et al.*, *Molecular Biology of the Cell*, 5th or 6th Edition, (Also required for Dr. Das's CBCH course). Each instructor may assign or recommend topic-specific papers at his/her discretion.

Course Objectives: This is a team-taught course aimed at providing an overview of research methods and techniques in modern molecular biology and molecular biochemistry laboratories.

At the completion of this course, the students are expected to have achieved these specific learning objectives:

1. Understand the basic approaches used for the analysis and purification of the most important macromolecules and organelles of the eukaryotic cell.
2. Understand the principles underlying the approaches indicated above.
3. Be able to apply their knowledge of these techniques in the design of experimental procedures aimed at testing specific hypotheses.

Course Activities/Assignments: Each instructor will present the objectives and background of their research projects during their first class session and will discuss the major research techniques in use in their lab during the second one.

Grading: Your grade will be based on your attendance and participation (25%) and on a written summary of the work presented by ONE professor (75%). You may

select any instructor, including your major professor if you work in a lab. You are expected to meet with your selected professor to answer any questions prior to turning in your paper; failure to do so is likely to result in a reduced grade. Grading scale: A=90-100%; B=80-89%; C=70-79%; D=60-69%; F is <60%. Grading is NOT based on a curve. Instead, you will each EARN a grade that reflects the effort you put into the course and the knowledge you have gained.

Absence and Drop Policy: It is your responsibility to attend class regularly. As noted above, you will be graded on attendance and participation. If you have a serious illness or a legitimate excuse (includes military personnel called to active duty or training) for being out of town, make arrangements with me before you leave. To receive an automatic "W", students must drop or withdraw from this class by the **November 2** drop date, as indicated in the academic schedule.

Academic Integrity Policy: It is the official policy of the University of Texas at El Paso that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Please see the Office of Student Conduct and Conflict Resolution (OSCCR) website at <http://sa.utep.edu/osccr/> for details.

Civility Statement: Please be respectful of all students' right to learn without disruption. In keeping with this statement, please make an active effort to keep the talking to a minimum during lectures and presentations. Also make an active effort to either turn cell phones off or turn them to vibrate mode prior to the start of class.

Disability Statement: If you have a disability and need classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, by email to cass@utep.edu, or go to Union Building East, Room 106. For additional information, please visit the CASS website at <http://www.utep.edu/CASS>. CASS' Staff are the only individuals who can validate and if need be, authorize accommodations for students with disabilities.

Class Schedule:

#	Day/Date	Instructor
1	T Aug. 28	Dr. Manuel Miranda
2	R Aug. 30	
3	T Sept. 4	Dr. Sid Das
4	R Sept. 6	
3	T Sept. 11	Dr. Manuel Llano
4	R Sept. 13	
5	T Sept. 18	Dr. Charles Spencer
6	R Sept. 20	
7	T Sept. 25	Dr. Anita Quintana
8	R Sept. 27	
9	T Oct. 2	Dr. Charlotte Vines
10	R Oct. 4	
11	T Oct. 9	Dr. Kyle Johnson
12	R Oct. 11	
13	T Oct. 16	Dr. Marc Cox
14	R Oct. 18	
15	T Oct. 23	Dr. Armando Varela
16	R Oct. 25	
17	T Oct. 30	Dr. Kyle Johnson
18	R Nov. 1	
19	T Nov. 6	Dr. Hugues Ouellet
20	R Nov. 8	
21	T Nov. 13	Dr. Kyle Johnson
22	R Nov. 15	
23	T Nov. 20	Thanksgiving Break - no classes
--	R Nov. 22	
24	T Nov. 27	Dr. Kyle Johnson
25	R Nov. 29	
26	T Dec. 4	Dr. Kyle Johnson
27	R Dec. 6	Dr. River Xiao